

# **ELECTROSEAL™ ECE85**

# **Electrically Conductive Elastomer**

## LAIRD™ ELECTROSEAL™ ECE85

The ELECTROSEAL™ ECE85 Electrically Conductive Elastomer from Laird Performance Materials is a silver coated glass filled silicone elastomer. It has excellent EMI shielding at temperature extremes, ozone and pressure resistant, and has a long shelf life. This material is designed for molded and extruded EMI gaskets, or can be formed into sheets and then die cut.

### **FEATURES AND BENEFITS**

- Silver coated glass filled silicone with balance performance
- Utilized both conductive and non-conductive materials
- Retain strong EMI protection
- Available for both molding and extrusion
- RoHS compliant and halogen free per IEC-61249-2-21 standard

## **MARKETS**

- Telecom
- Datacom
- Industrial
- Automotive

### **CHARACTERISTICS**

Item	Unit	Typical Value <sup>^1</sup>	Test Method
Base elastomer		Silicone	-
Conductive filler		Silver coated glass	-
Color	-	Tan	Visual inspection
Density	g/cm <sup>3</sup>	1.9	ASTM D792
Hardness, Shore A <sup>2</sup>	-	70	ASTM D2240
Volume resistivity	Ohm-cm	0.005	MIL-DTL-83528E Para 4.5.11
Tensile strength	MPa	1.9	ASTM D412
Elongation	%	100	ASTM D412
Tear strength	N/mm	16	ASTM D624(die C)
Compression set	%	10	ASTM D395(B) 22hrs@125℃
Outgassing, TML	%	0.1	ASTM E595
Outgassing, CVCM	%	0.02	ASTM E595
Shielding Eff <sup>3</sup>	dB	100	MIL-DTL-83528E para 4.5.12
Operation temp.	$^{\circ}\!\mathbb{C}$	-40 to 155	-

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- ^1: Typical values above are based on standard test methods.
- ^2: This will be varied with part size and processing process.
- ^3: Average SE @10GHz

## **SHELF LIFE**

12months at 23°C/60%R.H.

#### Note:

ECE85 is also known as ECE85E or ECE85M. The suffix of "E"or "M" means the parts are forming by extrusion or molding only. The composition and performance are almost the same among ECE85, ECE85M, and ECE85E.

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